

U.S. Patent Application Serial No. 10/556,358  
Response to OA dated July 27, 2007

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

Claim 1 (Currently Amended): A joint connector block comprising: a block body having a plurality of connector-fitting chambers arranged in a line on one side of the block body, for receiving connectors of at least one outside wiring harness, and a busbar-receiving part communicating with the connector-fitting chambers on an opposite side of the block body;  
a plurality of longitudinal busbars, each of which includes at least one branch terminal projecting in the connector-fitting chamber and at least one pair of clip terminals situated on the side of the busbar-receiving part; and  
a plurality of lateral busbars, each of which includes at least one branch terminal projecting in the connector-fitting chamber and a connecting part to be connected to the pair of the clip terminals on the side of the busbar-receiving part, the lateral busbar being connected to at least two of said longitudinal busbars crossing the longitudinal busbars at right angles;  
wherein said branch terminals of said longitudinal busbars and said branch terminals of said lateral busbars are arranged in a line in said connector-fitting chambers for connecting with connectors of the at least one outside wiring harness.

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Claim 2 (Original): The joint connector block according to claim 1, wherein the busbar-receiving part includes: a plurality of slit grooves, each of which receives the longitudinal busbar; and a plurality of lateral slits, each of which engages with the connecting part of the lateral busbar, the lateral slit crossing the slit groove at right angles.

Claim 3 (Previously Presented): A joint connector block comprising:

a block body having a plurality of connector-fitting chambers arranged in a line on one side of the block body and a busbar-receiving part communicating with the connector-fitting chambers on an opposite side of the block body;

a plurality of longitudinal busbars, each of which includes at least one branch terminal projecting in the connector-fitting chamber and at least one pair of clip terminals situated on the side of the busbar-receiving part; and

a plurality of lateral busbars, each of which includes at least one branch terminal projecting in the connector-fitting chamber and a connecting part to be connected to the pair of the clip terminals on the side of the busbar-receiving part, the lateral busbar being connected to the longitudinal busbar crossing the longitudinal busbar at right angles;

wherein the busbar-receiving part includes:

a plurality of slit grooves, each of which receives the longitudinal busbar; and

a plurality of lateral slits, each of which engages with the connecting part of the lateral busbar, the lateral slit crossing the slit groove at right angles; and

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a concave groove is formed in a partition wall of the connector-fitting chamber continuously from the lateral slit, the branch terminal of each said longitudinal or lateral busbar being inserted through the concave groove.

Claim 4 (Previously Presented): The joint connector block as claimed in claim 1, wherein the branch terminal of the longitudinal busbar is offset in a direction crossing at right angles from a connection part from which the pair of the clip terminals protrudes, while the branch terminal of the lateral busbar is on the same plane as that of the connection part of the lateral busbar.

Claim 5 (Previously Presented): The joint connector block as claimed in claim 1, wherein a plurality of ribs are projectingly formed on a partition wall of the connector-fitting chamber, the rib insulating the branch terminals of each said longitudinal or lateral busbar from each other.

Claim 6 (Previously Presented): The joint connector block as claimed in claim 1, wherein each end of the pair of the clip terminals protrudes outward from the busbar-receiving part.

Claim 7 (Previously Presented): The joint connector block as claimed in claim 1, wherein a cover is fitted to the block body and each said longitudinal or lateral busbar abuts against the cover, thereby preventing each busbar from slipping out.

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Claim 8 (Previously Presented): A joint connector block, comprising

a block body having a plurality of connector-fitting chambers arranged in a line on one side of the block body and a busbar-receiving part communicating with the connector-fitting chambers on an opposite side of the block body;

a plurality of longitudinal busbars, each of which includes at least one branch terminal projecting in the connector-fitting chamber and at least one pair of clip terminals situated on the side of the busbar-receiving part; and

a plurality of lateral busbars, each of which includes at least one branch terminal projecting in the connector-fitting chamber and a connecting part to be connected to the pair of the clip terminals on the side of the busbar-receiving part, the lateral busbar being connected to the longitudinal busbar crossing the longitudinal busbar at right angles;

wherein a cover is fitted to the block body and each said longitudinal or lateral busbar abuts against the cover, thereby preventing each busbar from slipping out; and

the cover includes: a plurality of ribs against each of which an end of each said pair of the clip terminals abuts; and a plurality of grooves, each of which is formed between the ribs, the connection part of the lateral busbar entering in said groove.

Claim 9 (Original): The joint connector block according to claim 8, wherein said groove is provided with an inclined shaped guide surface on the inlet side of the groove.

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Claim 10 (Previously Presented): The joint connector block as claimed in claim 1, wherein each said longitudinal or lateral busbar is formed by cutting a laterally linked terminal into a required shape.

Claim 11 (Original): The joint connector block according to claim 10, wherein an unnecessary pair of the clip terminal or branch terminal is cut off from the connecting part of the longitudinal or lateral busbar, and/or the connecting part is cut into a required length or cut at a required position.

Claim 12 (Previously Presented): The joint connector block as claimed in claim 2, wherein the branch terminal of the longitudinal busbar is offset in a direction crossing at right angles from a connection part from which the pair of the clip terminals protrudes, while the branch terminal of the lateral busbar is on the same plane as that of the connection part of the lateral busbar.

Claim 13 (Previously Presented): The joint connector block as claimed in claim 3, wherein the branch terminal of the longitudinal busbar is offset in a direction crossing at right angles from a connection part from which the pair of the clip terminals protrudes, while the branch terminal of the lateral busbar is on the same plane as that of the connection part of the lateral busbar.

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Claim 14 (Previously Presented): The joint connector block as claimed in claim 2, wherein a plurality of ribs are projectingly formed on a partition wall of the connector-fitting chamber, the rib insulating the branch terminals of each said longitudinal or lateral busbar from each other.

Claim 15 (Previously Presented): The joint connector block as claimed in claim 3, wherein a plurality of ribs are projectingly formed on a partition wall of the connector-fitting chamber, the rib insulating the branch terminals of each said longitudinal or lateral busbar from each other.

Claim 16 (Previously Presented): The joint connector block as claimed in claim 2, wherein each end of the pair of the clip terminals protrudes outward from the busbar-receiving part.

Claim 17 (Previously Presented): The joint connector block as claimed in claim 3, wherein each end of the pair of the clip terminals protrudes outward from the busbar-receiving part.

Claim 18 (Previously Presented): The joint connector block as claimed in claim 2, wherein a cover is fitted to the block body and each said longitudinal or lateral busbar abuts against the cover, thereby preventing each busbar from slipping out.

Claim 19 (Previously Presented): The joint connector block as claimed in claim 3, wherein a cover is fitted to the block body and each said longitudinal or lateral busbar abuts against the cover,

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thereby preventing each busbar from slipping out.

Claim 20 (Previously Presented): The joint connector block as claimed in claim 2, wherein each said longitudinal or lateral busbar is formed by cutting a laterally linked terminal into a required shape.